Wildlife Habitat Management for Small Woodlots

Todd Fredericksen

Ferrum College

Habitat

All resources needed for survival and reproduction

- **Food**
- **Cover**
- **Water**
- **Breeding locations**
- **Space**

Habitat Management

- **Manipulate habitat to initiate a change in wildlife behavior and population size**
- **“If you build it, they will come”**
- **Maybe…**
- **If they exist, can find it, etc.**

Starting Points

- **What do you want? – what type(s) of wildlife, how many?**
- **What do you have? – size of property, current wildlife species**
- **What is in surrounding landscape? – species, habitat types**
- **Start with small habitat improvement projects and build gradually**
- **Use available resources – stewardship programs, cost-share**

Consider landscape context

N
Google earth
Imagery Date: 10/24/2011
1996
36°54'12.94" N 80°01'48.15" W elev 1303 ft
Eye alt 4536 ft

Habitat

All resources needed for survival and reproduction

- **Food**
- **Cover**
- **Water**
- **Breeding locations**
- **Space**

Feeding Wildlife


52F
02/05/06
01:48 PM

Food plots

- **Expensive and often unnecessary?**
- **Should be small (¼ - 5 acres)**
- **Maximize edge around the plots**
- **Clover, lespedeza, sorghum, wheat**


Food and Cover with bare ground interspersed to allow for movement of smaller species
Mix of forbs, grasses, and open areas


Plant grains near cover.
Leave standing.


Encourage shrubs that
produce berries & fruit
for cover and food

Trees and Shrubs

Mast Trees

Oak, Hickory, Beech, Walnut

Fruit-producing Trees and Shrubs

Dogwood, Elderberry, Spicebush, Serviceberry, Persimmon, Chokecherry

Cover

- Shelter from weather
- Denning and nesting
- Hiding cover
- Escape cover

Importance of stand structure

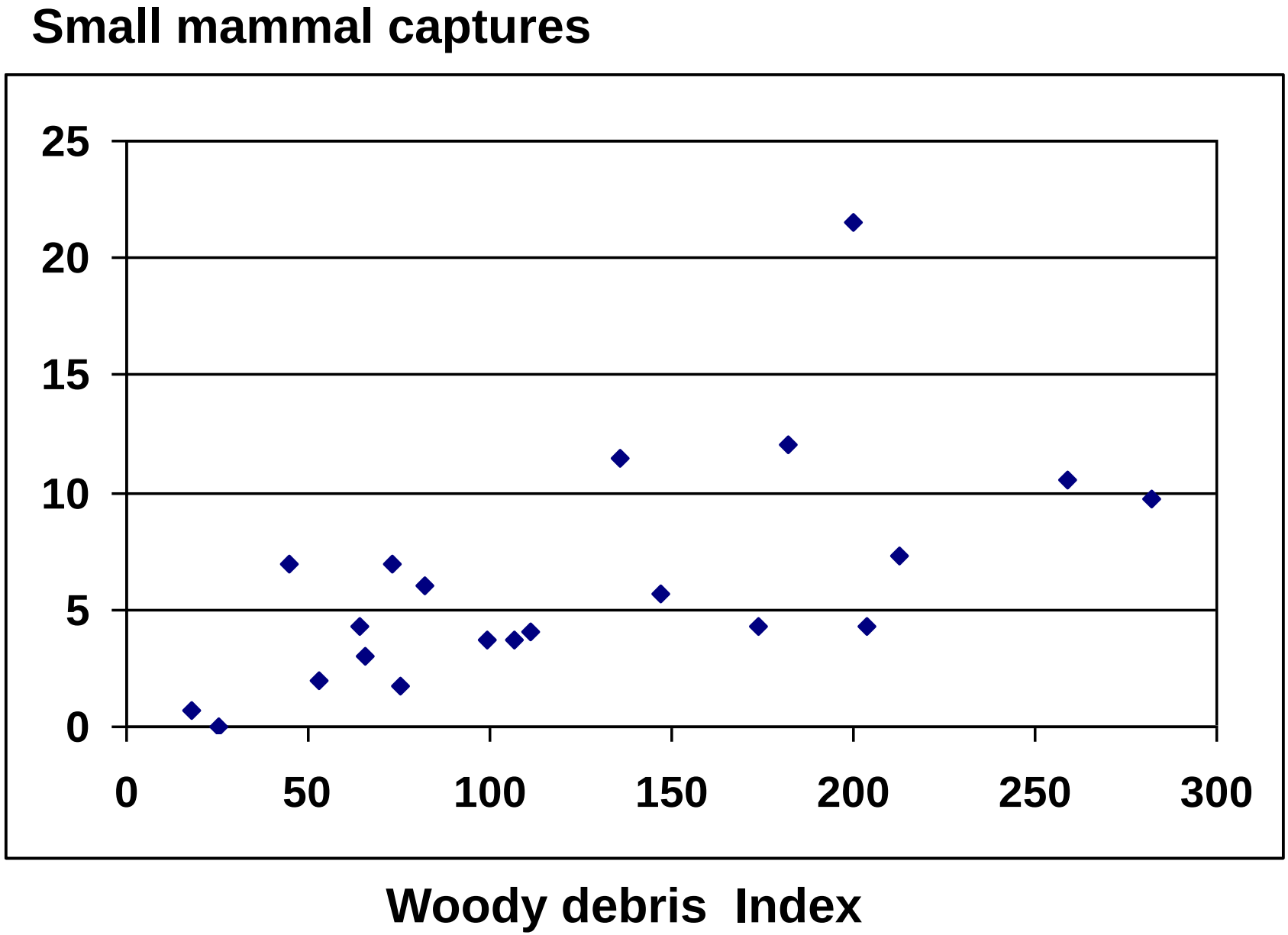
Conifers provide good thermal cover


Brush Piles

Coarse woody debris

Fallen trees and branches provide cover for wildlife

Small mammal captures and woody debris

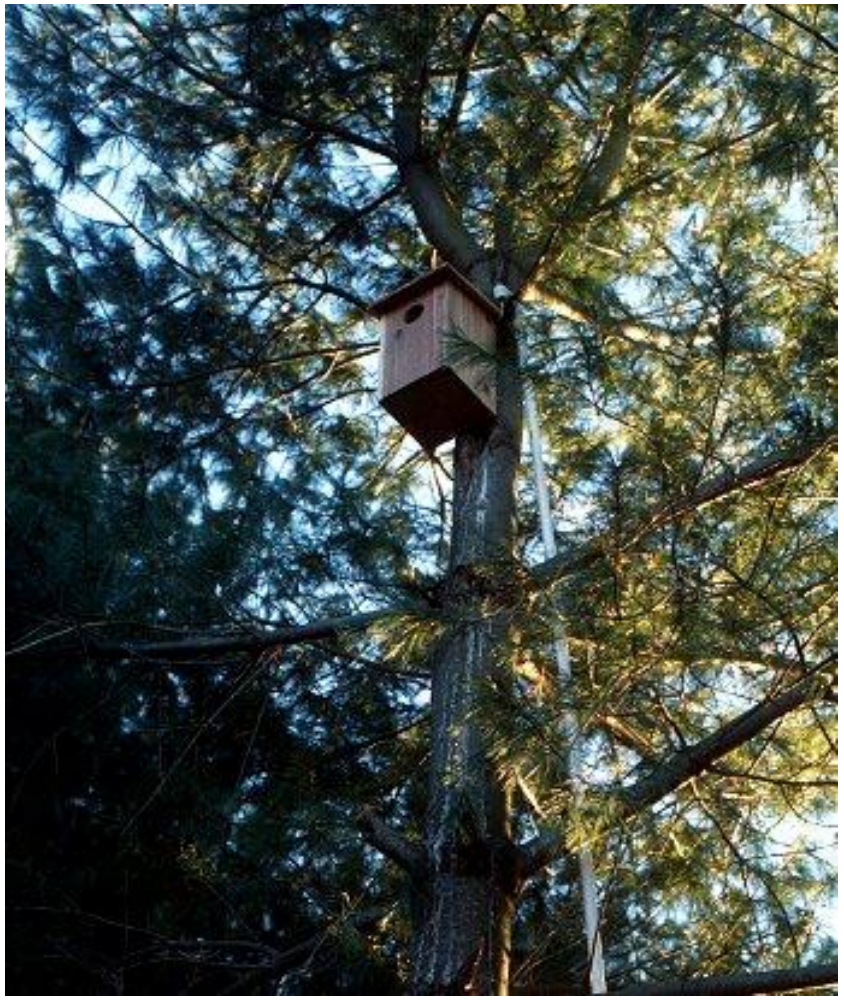


Provide Nesting Habitat

Leave Snags and Cavity Trees

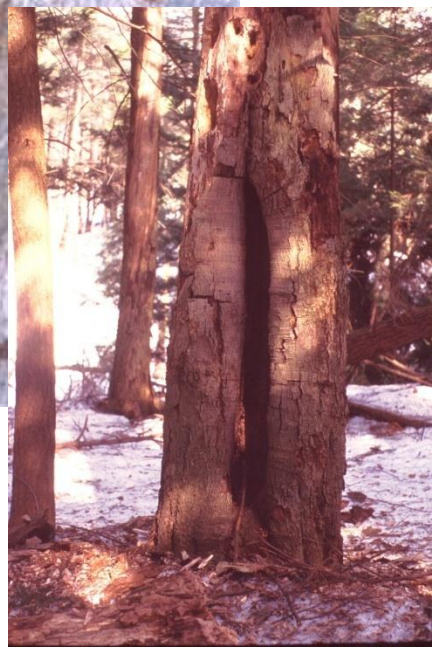
Artificial Nest Boxes / Platforms

Ground Cover



Snags and Cavity Trees

- **Foraging, perches, cover, nesting and denning sites**
- **Retain a variety of different-sized trees**
- **Hardwoods last the longest, but some species need softwoods**
- **Make snags?**




Provide travel corridors

Water

Protect vernal pools

Protect riparian buffers for water and cover

Successional Stages

Stage 1 = Bare ground

Stage 2 = Annual grasses

Stage 3 = Perennial grasses and forbs

Stage 4 = Shrubs

Stage 5 = Young forests

Stage 6 = Mature forests

Edge Habitats

Many wildlife species utilize multiple successional stages

Edge and Interspersion

In general, if you…

Maximize habitat heterogeneity

You will…

Maximize wildlife species diversity


Good edge cover
Cover overhead at waist height
Open at ground level


Abrupt “sharp” edges
Offer very little cover


Gradual “soft” edge provides more food and cover for more species

Consequences of increased edge

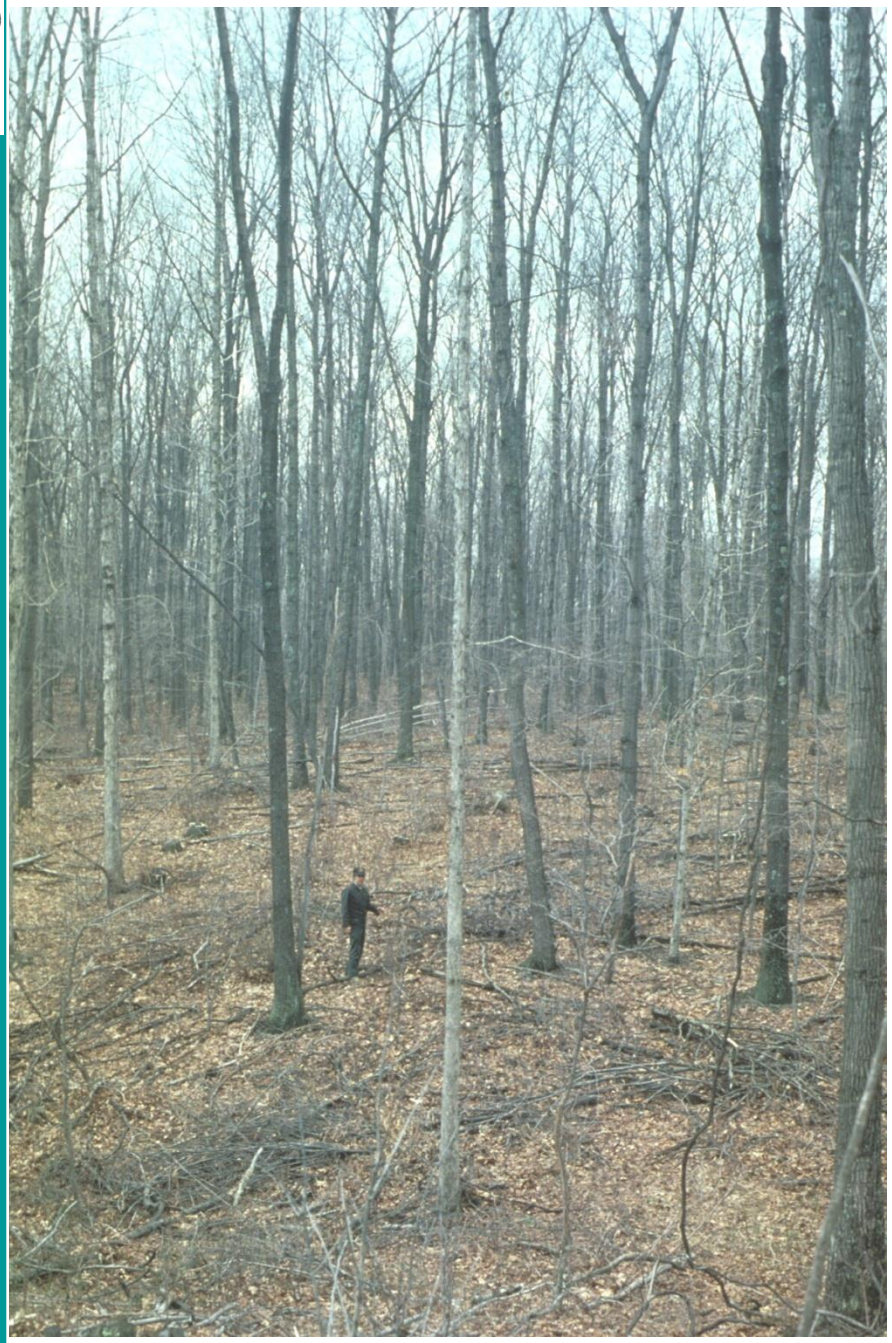
- May increase edge predation and parasitism

- Decrease in habitat for forest interior species (e.g., squirrels, some songbirds)

- May encourage invasive plant species


6/01/2011 8:21 AM
Cuddeback

Forest violence



Forest openings

Thinning promotes growth of understory which provides cover, nest sites, and food

Logging Roads

- **Seeding reduces erosion and can serve as food plots**
- **Often used as travel corridors for wildlife**

Clearcuts

Create several small clear-cuts over a period of time

Irregularly shaped or strips (creates more edge)

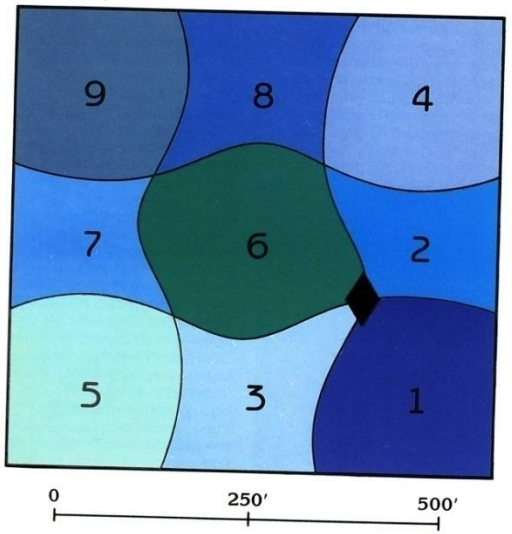


Figure 29. A timber harvesting plan for a ten acre woodlot.


Small, irregularly shaped clearcuts
create more edge and interspersion
than large rectangular clearcuts.


Clearcuts look devastating
but provide habitat for
many wildlife species


Regrowth following a clearcut


Regeneration of many species creates interspersion, cover and wildlife foods


Five years following a clearcut -


20 years following a clearcut:
Healthy, mature trees with
understory for cover

Summary

Provide food, cover, & water

Variety of habitat = Variety of wildlife

Provide edge, interior and interspersion

Avoid impacting large areas all at once

Manage with consideration of the landscape context

Good luck!